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gons

- Polygons with the same Shape but different Size.
- Polygons are ~~congruent~~ similar if:

(1) Corresponding angles are ≅.

(2) Corresponding sides proportiona

- The ratio of corresponding sides is called the Similarity ratio / Scale factor
- If polygons are similar, then their perimeter are also proportio

The ratio of the sides are the same.

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Matters!}

What is the scale factor of ΔABC to ΔDEF?

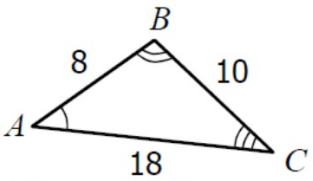
$\frac{AB}{DE} = \frac{8}{12} = \frac{2}{3}$

What is the scale factor of ΔDEF to ΔABC?

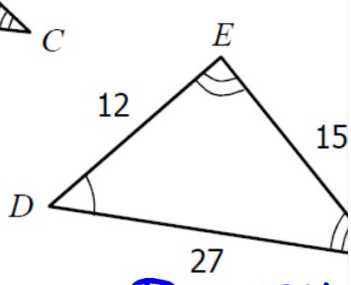
$\frac{DE}{AB} = \frac{12}{8} = \frac{3}{2}$

What is the ratio of the perimeter of ΔDEF to ΔABC?

$\frac{54}{36} = \frac{3}{2}$



$P = 36$



$P = 54$

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tements

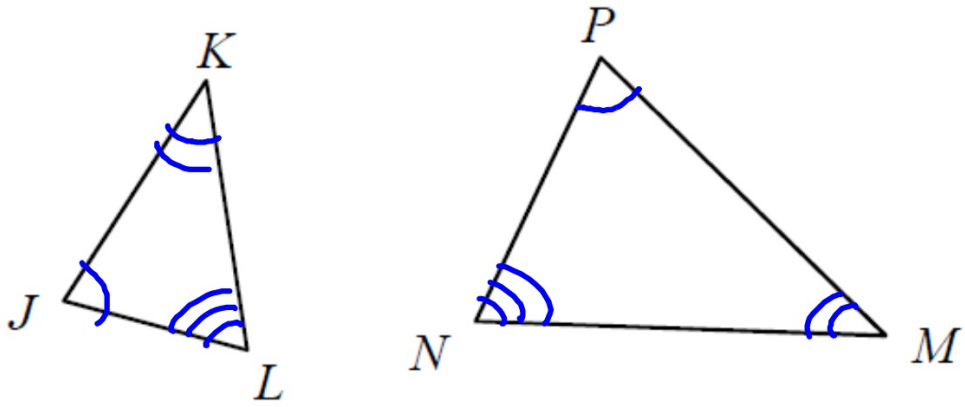
for Similar: ~

A valid similarity statement must match corresponding angles and

Write a similarity statement for the triangles above:

$\triangle DEF \sim \triangle ABC$ with a similarity ratio of $\frac{3}{2}$.

1. $\Delta JKL \sim \Delta PMN$



Angles	Sides
$\angle J \cong \angle P$	$\frac{JK}{PM} = \frac{KL}{MN} = \frac{LJ}{NP}$
$\angle K \cong \angle M$	
$\angle L \cong \angle N$	